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October 14, 1997

The Honorable Federico Pena
Secretary
Department of Energy
1000 Independence Avenue SW
Washington, DC, 20585

Dear Secretary Pena:

I am writing to express my concerns regarding the status of safeguards and security at sensitive Department of Energy (DOE) nuclear weapons facilities.

A May 20, 1997 article in the Denver Post reported serious concerns with and failures of security measures intended to prevent the theft or diversion of nuclear materials at the Rocky Flats site. Reportedly, security officers have warned federal investigators that security at this facility "is so flawed that terrorists from inside or out could steal plutonium to make a bomb", and it has also been alleged that members of anti-government groups have contacted guards at the plant. A concerned official reportedly tested the security systems at the facility by "wrapping his head in a towel, Middle-Eastern style" and putting a helmet on, but still gained access to the facility. In other tests, fake nuclear materials were reportedly removed from the facility without detection and acts of radiological sabotage were simulated. The article also reports that the Director of the Safeguards and Security Division at Rocky Flats resigned his position "in disgust" after only three months on the job.

I am alarmed by this and other published reports suggesting that access to the materials that could be used to construct nuclear weapons appears to be far too easily obtained. Unfortunately, internal DOE documents suggest this problem is not isolated to a single DOE facility, but affects several major DOE facilities and sites, including Los Alamos National Laboratory, Lawrence Livermore National Laboratory and the Y-12 Site at Oak Ridge National Laboratory.

Specifically, a January 27, 1997 DOE report entitled "Status of Safeguards and Security for 1996" outlined serious flaws in DOE measures currently in place to secure special nuclear material, nuclear weapons, and classified and sensitive unclassified information associated with the nation's nuclear stockpile. The report cites a global increase in terrorist attempts to steal or utilize weapons of mass destruction, and states that "DOE's posture is less robust than in the past, and as a consequence, its ability to deter potential adversaries and defeat them if deterrence fails is much less certain." The DOE report points to security flaws and concerns at DOE facilities that include: the failure to properly characterize and fully inventory stores of nuclear materials; the possibility that weapons-usable materials might be mistakenly treated as waste; the fact that aging and inadequate storage facilities are being used to store sensitive nuclear materials; the concern that many safeguards and security line-item-construction projects are being delayed, reduced or canceled; the use of obsolete safeguards and

security systems which no longer provide the necessary level of protection required in today's security environment; the concern that security personnel have not received adequate training; and the fact that four weapons facilities and five non-weapons facilities have less than satisfactory security ratings in at least one topical safety area.

I am concerned that the shortcomings in safeguards and security that have been reported could represent a threat to national security. According to a January 1997 DOE report entitled "A Dynamic Terrorist Threat Response," domestic bombing incidents have increased from 687 incidents causing $6.3 million in damages in 1983 to 3,200 incidents causing more than $500 million in damages in 1994. Recent statistics show that 137 of the 441 so-called militia groups in the U.S. have ties to white supremacist and anti-government groups, and anti-government groups exist in close proximity to all DOE sites. As you may know, instructions on how to design crude nuclear weapons exist on the World Wide Web as well as in print. If a member of a terrorist or anti-government group were able to obtain access to nuclear materials, a back-of-the-envelope calculation indicates that even a crude nuclear weapon could produce an explosive force roughly 1000 times as strong as the explosion that destroyed the Murrah Building in Oklahoma City. Since the consequences of a breach of DOE security are so grave, I ask your prompt assistance in answering the following questions regarding the nature and adequacy of DOE safeguards and security measures.

Security of nuclear materials at the Rocky Flats facility

The aforementioned May 20, 1997 article in the Denver Post cites allegations that members of anti-government groups who may be a threat to public safety have attempted to contact and recruit DOE security personnel. The past commander of the Rocky Flats guard force reportedly warned federal investigators that an "anti-government Montana militia tried to recruit members from the plant's 200-person force."

A June 29, 1997 article in the Denver Post described an incident in which uncleared personnel were discovered "sweeping" the Rocky Flats site for secret listening devices. Reportedly, Kaiser Hill, the contractor charged with running the site, suspected that the DOE Office of Safeguards and Security was bugging the site, and they allegedly decided to circumvent protocol and gave site access to uncleared personnel to remove the "bugs," without even informing the proper authorities. This incident highlights the possibility that uncleared personnel (who may have ties to terrorist groups or foreign governments) could have been granted access to sensitive nuclear materials or restricted data.

1. The May 20, 1997 Denver Post article reports that security officials at Rocky Flats have warned that "terrorists from inside or out could steal plutonium to make a nuclear bomb,", and that "an anti-government militia tried to recruit members from the plant's 200-person force." According to the article, Jeff Peters, a former director of operations for a guard force at Rocky Flats, reported that he was invited to the home of a guard to watch videos which called for people to unite against the government. Peters later warned his superiors about six guards who might have ties to anti-government groups.

(a) How has DOE responded to allegations that "anti-government militia" groups have attempted to recruit members from Rocky Flats security personnel? What actions did DOE take in order to determine whether the six guards identified by Peters were in fact members of militant anti-

government groups who may pose a threat to public safety? What is DOE's policy regarding its employment of people who are known to belong to militant anti-government groups in positions that involve access to nuclear materials? What has DOE done to assess the possibility that such groups may try to recruit members from security forces or other personnel at other sensitive DOE facilities? Does DOE regard such personnel to pose a potential risk to the safety and security of stores of nuclear materials and weapons? If not, please explain.

(b) The June 29, 1997 Denver Post article alleges that uncleared personnel were granted access to the Rocky Flats facility and were found searching the site for secret listening devices in the middle of the night. How has DOE responded to this allegation in order to determine whether it is true? If the allegation has been found to be true, what disciplinary action has DOE taken against Kaiser Hill or its employees? If no disciplinary action has been taken, please justify. What actions have DOE taken to ensure that the proper security clearances are obtained for any prospective DOE contractors or subcontractors operating in sensitive areas at the site in the future? Does DOE have a list of the names of the uncleared personnel who obtained access to sensitive areas within the Rocky Flats facility? Has the DOE and/or the FBI conducted any investigations into the background of those personnel in order to determine whether security at the Rocky Flats facility may have been compromised by the access granted to those personnel? If not, why not? If so, please summarize the nature and results of the background checks.

(c) The May 20, 1997 Denver Post article reports that David Ridenour, the former director of security at the plant, said that security clearances were being extended two years without conducting background checks. Is this true? If the answer is yes, please describe for each such case the justification for the decision to forgo the required background checks.

(d) How often does the FBI cross-reference names of DOE/DOE-contractor security personnel with names of members of groups that it believes may pose a threat to national security or public safety? If the FBI does not perform such cross-references, would you agree that such an exercise would prove useful in identifying current or prospective security personnel who might have ties to groups who might wish to obtain nuclear materials or weapons for terrorist or other illegal purposes? If the FBI does perform such cross-references, please indicate whether any current DOE/DOE contractor security personnel have been identified to have ties to organizations that the FBI considers to pose a threat to national security or public safety, and what actions DOE has taken in response.

2. The aforementioned May 20, 1997 article alleges that 27,000 containers of plutonium stored at Rocky Flats went uninventoried for months at a time, that dozens of false security alarms went off each day, and that staged security exercises resulted in breaches of security as serious as thefts of plutonium by "adversaries". In one case, 990 pounds of plutonium were reportedly placed in a temporary vault that had only one lock, exposed screws on hinges, and an alarm system that was described as easily deactivated. This suggests that the nuclear material stored at Rocky Flats may be vulnerable to theft, may not be fully accounted for, and moreover, may be stored in forms which can be readily transformed into a nuclear or radiological weapon.

(a) What steps has DOE taken to determine whether the allegations that nuclear materials at Rocky Flats is uninventoried and stored in an insecure manner are true? If true, what steps has DOE taken to ensure that these problems have been corrected? Were any disciplinary actions taken against

the personnel who were found to be responsible for these serious lapses in security? If so, what action was taken? If not, why was no action taken? What is DOE doing in order to ensure that similar lapses in nuclear materials accounting and safeguards practices are not occurring at other DOE sites?

(b) In light of the reported combination of poor security and a failure to conduct regular material inventories, is DOE confident that it knows exactly how much nuclear material is stored at Rocky Flats? If the answer is yes, please justify your response. If the answer is no, then can DOE be completely certain that thefts of nuclear materials have not already occurred?

(c) It has been suggested that crude nuclear and radiological weapons could be constructed using nuclear materials from Rocky Flats within several hours, given the form of the plutonium stored at the site and assuming that the person constructing the weapon had access to high explosives. Is this true? Do stores of metallic or non-metallic plutonium exist at Rocky Flats which could be quickly surrounded by high explosives such that within several hours after capture of the material a credible nuclear explosive threat might exist? If the answer is yes, please indicate the steps that DOE is taking to secure these highly sensitive materials or to transform them into chemical compounds that would be unsuitable for ready use in a nuclear or radiological weapon.

(d) It has been suggested that if individuals representing terrorist organizations were to gain insider access to the facility, they would have access to the equipment that was used to manufacture plutonium at Rocky Flats, raising the possibility that such persons might have the access and ability to manufacture their own stores of plutonium. Is there any residual plutonium manufacturing capability at Rocky Flats which might be exploited by persons who succeed in obtaining access to the facility? If so, please indicate what is being done to secure such equipment or technology from insider or other threats.

(e) It is my understanding that beryllium is used in the manufacture of nuclear weapons, and that it is also an extremely toxic element that could be used in the construction of chemical weapons. How much beryllium is stored at the Rocky Flats facility? Please describe the health hazards associated with the diversion and subsequent use of beryllium as a chemical weapon. Please describe the safeguards that are in place to ensure the security of the beryllium at Rocky Flats. Is it the intention of DOE to permanently store excess beryllium at Rocky Flats?

Security and Safeguards Throughout DOE

A January 1997 DOE report entitled "Status of Safeguards and Security for 1996" (hereafter to be referred to as the January 1997 report) details numerous flaws and shortcomings in many DOE facilities' security and safeguards policies and practices. For example, Los Alamos National Laboratory, a facility that is responsible for designing and developing nuclear weapons, is said to be "unable to determine alarm rates, alarm reliability, necessary response and seriousness of alarm notification." Another weapons design facility, the Lawrence Livermore National Laboratory, has received marginal safety ratings in several safety categories such that "special nuclear materials and vital assets are at increased risk, as well as personnel safety for exercise participants and the public." In total, four weapons facilities and five non-weapons facilities have less than satisfactory security ratings in at least one topical safety area.

A June 1997 DOE report entitled "Report to the Deputy Secretary on Office of Safeguards and Security Report on "Status of Safeguards and Security for 1996"" (hereafter to be referred to as the June 1997 report) appears to downplay almost all of the safety concerns raised by the January 1997 report. It dismisses the claim that nuclear materials or weapons are at risk, and only concedes to several funding shortfalls at various DOE facilities that are required to cover safety-related training and equipment. The report does not address the site-specific reports of flawed security at DOE facilities, and appears to draw an entirely different conclusion as to the adequacy of safeguards and security at DOE facilities than does the January 1997 report.

On July 2, 1997, Edward J. McCallum, the Director of the Office of Safeguards and Security and author of the January 1997 report, wrote an internal DOE memo entitled "Safeguards and Security Review Group's Report." This memo, which appears to have been written in response to the June 1997 report, states that "the [June 1997] report misses the point entirely and leaves the reader with the important misimpression that safeguards and security in the Department of Energy is either satisfactory or will be soon. Neither is correct." The memo goes on to say that the June 1997 report focuses exclusively on FY-98 funding issues rather than on the DOE safeguards and security policy issues raised in the January 1997 report, and also takes issue with the fact that the June 1997 report suggests that the DOE Office of Safeguards and Security no longer be the office responsible for issuing reports related to DOE safeguards and security.

A draft report on nuclear physical security prepared by the Department of Defense (DOD) is even more critical of DOE safeguards and security, finding a lack of career physical nuclear security expertise at all ranks of federal employees within DOE. Specific observations at DOE sites included one instance in which more than 13,000 false alarms were triggered at the facility's perimeter in a single month, and yet no corrective measures were taken. The report goes on to criticize some of the internal DOE communications which only addressed the technical elements of the January 1997 report without conducting a review of its essential elements. The DOD report recommends that an independent review of DOE safeguards and security be undertaken.

1. Section 3156 of the Senate-passed Department of Defense Authorization Bill recommends the establishment of an Independent Commission, which would be composed of eight members in both the public and private sectors who have significant experience in matters relating to the safeguarding and security of nuclear weapons and materials. In light of the dramatic disagreement between various offices within DOE regarding the status of safeguards and security at DOE facilities, do you believe that it would be useful to appoint such an Independent Commission to review the sufficiency of DOE nuclear weapons and materials safeguards and security programs? If not, please justify your response.

2. The January 1997 report identifies a number of budget shortfalls in the safeguards and security requirements totaling $157 million. $50.8 million of this was identified to be a shortfall in security personnel requirements and training. This report notes that there has been a 42% reduction in DOE Protective Force since 1992. It is also reported that the Lawrence Livermore National Laboratory eliminated its Special Response Team in order to cut costs, opting to entrust local law enforcement personnel with this important function. However, it is claimed that "the Alameda County Sheriff's Office is not trained to function within this nuclear facility or to address the potential hazards of conducting tactical operations within the buildings and surrounding areas, not can it adequately operate as a special response force." The DOD draft report also mentions deficiencies in the training and

coordination of security personnel. However, the June 1997 report states that the "$50.8 million cannot be properly validated or invalidated at this time."

(a) Are the cuts in funding for DOE safeguards and security due to a failure on the part of DOE to request such funds, a failure by Congress to appropriate all the funds that were requested, or a combination of both? For the past five years, please indicate the amount of funds requested for DOE safeguards and security along with the amount authorized and appropriated by Congress. By comparison, how have budgets for nuclear weapons research and development and related stockpile stewardship activities fared during this same period? If DOE has not requested additional funds, please justify that decision in light of the reports of security breaches at DOE facilities. Would you agree that cuts in funding have resulted in a smaller, less well-trained security personnel force, in light of the numerous documented breaches of site security at the Rocky Flats facility, the reports of the failures of Los Alamos security personnel to characterize and respond to alarms, and the fact that four weapons facilities and five non-weapons facilities have less than satisfactory security ratings in at least one topical safety area? If not, why not, and if so, please indicate the steps that DOE is taking to address this problem.

(b) There is currently a high inventory of special nuclear materials (SNM) at DOE facilities as nuclear weapons are being dismantled in accordance with international treaty requirements. The January 1997 report states that "Over 50 facilities at 12 geographic locations are being used to store SNM although they were never designed for that purpose," and recommends that the DOE consolidate its stores of SNM in appropriately constructed facilities. Does DOE plan to request the funds to construct new facilities or consolidate the storage of materials in existing facilities in order to store these materials safely? If so, where will they be located, how much will they cost to construct, and when will they be completed? How does DOE plan to address the problems associated with the temporary storage of SNM at reportedly unsuitable locations (such as the Savannah River "K" reactor) until the permanent facilities are constructed? If there are no plans to construct such facilities, how does DOE plan to address long-term storage of the SNM that is stored in unsuitable locations?

3. The January 1997 report indicates that four weapons facilities and five non-weapons facilities received marginal safety ratings in at least one topical safety area. Many of these sites are also overdue in submitting their annual Site Safeguards and Security Plans (SSSPs), which are said to be helpful in identifying security problems and providing a strategic plan to correct them.

(a) For each facility that received a marginal or unsatisfactory rating in any safety area, please indicate the steps that DOE is taking to ensure that the SSSPs will be completed in a timely manner and that the SSSPs will be reviewed to ensure that they adequately characterize the problems that were identified in the January 1997 report.

(b) The January 1997 report assigned an unsatisfactory rating to the Nuclear Materials Control and Accountability area at the Mound Plant, citing a lack of progress in correcting deficiencies identified at the plant in 1994 and problems with the tritium gas recovery process which led to material accounting discrepancies. This example raises the concern that while the SSSP process can identify problems, there is no guarantee that steps will be taken to correct the problem. How does DOE plan to ensure that once problems in safeguards and security at DOE sites are identified through the SSSP (or other) process, steps will be taken in a timely manner to correct those problems?

4. On February 23, 1996, a memo was sent from the Director of the Office of Nonproliferation and National Security to then-Deputy Secretary Charles B. Curtis. That memo, entitled "Office of Inspector General Report on Audit of Internal Controls over Special Nuclear Materials" raises the concern that deficiencies at DOE sites "increase the risk that unauthorized movements of special nuclear materials could go undetected." The memo further indicates that several actions were being taken at that time in order to address these problems. The Office of Nonproliferation and National Security initiated a Fissile Materials Assurance (FMA) Working Group, which was intended to "ensure that vital materials measurements and physical inventories are conducted as a routine part of ongoing Department activities." That group, along with a Physical Security (PS) Working Group, was to report to the Department's National Security Cluster according to a March 29, 1996 memo from then Deputy-Secretary Charles B. Curtis. The FMA and PS Working Groups reportedly were to assist the Department in its efforts to resolve safety and security material protection issues in a coordinated fashion. On August 8, 1996, the PS and FMA Working Groups transmitted their first reports to the Associate Deputy Secretary for National Security, requesting the opportunity to brief the National Security Cluster on their findings. I have been informed that this briefing has yet to occur.

(a) Is it true that there have been no briefings between the Working Groups and the National Security Cluster since the August 8, 1996 request? If so, please explain. If any such briefings have taken place, please provide the dates and agendas for each such briefing, as well as copies of any reports or materials that were transmitted to the Nuclear Security Cluster during the briefings. If the Working Groups issued recommendations to the National Security Cluster in any of the briefings, please indicate the steps DOE is taking to implement them. If no steps are being taken, please justify.

I am concerned that while funding and personnel cuts have certainly added to DOE's challenge of maintaining adequate safeguards over nuclear materials, the apparent internal disagreement as to the essential nature of the safety shortfalls is preventing any real progress from being made. I trust that under your leadership, the DOE will be able to work in a coordinated fashion to guarantee the security of special nuclear materials. The consequences associated with failing to do so could be unspeakably damaging to our national security. I look forward to your prompt response to my concerns and to working with you on this and other important issues confronting the Department. Thank you very much for your consideration of this important matter.

Sincerely,

Edward J. Markey

Edward J. Markey
Member of Congress